

Work Order ID 148836

Monday, July 11, 2016 12:38:48 PM

148836

Page 1

Item ID: D3533-1

Revision ID:

Item Name: Set Screw

Start Date: 7/11/2016 Start Qty: 25.00

Required Date: 7/15/2016 Req'd Qty: 25.00

Reference:

Accept
DAS
13
9-89***N900040100***Setup Start ***NS1***Stop ***NS2***

Cust Item ID:

Customer:

Approvals: Process Plan: DAS 21 Date: JUL 11 2016 Tooling: _____ Date: _____
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3533	Rev B

100

0.00

100

Purchasing

Purchasing

PURCHASING

Memo

0.00

Issue P/O: 32990 Purchase Part Number: 92311A564 Supplier: MAC
MASTER CARR Certificate of conformity is requiredJUL 11 2016 DAS
13
9-89SO

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.08

Ensure material certification is attached

50x SO/6-7-18

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Quality Control

Memo

0.00

SODAS
38
9-89

JUL 18 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Monday, July 11, 2016 12:38:48 PM

148836

Page 2

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Set Screw

Start Date: 7/11/2016 **Start Qty:** 25.00

25

Cust Item ID:

Required Date: 7/15/2016 **Req'd Qty:** 25.00

25

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

Identify as per dwg & Stock Location: 51041

0.00

130

Packaging

Memo

0.04

Packaging

SC

DAS
8-89

JUL 19 2016

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.42

Quality Control

**DAS
21
9-89**

~~JUL 19 2016~~

**DAS
21
9-89**

JUL 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, July 11, 2016 12:38:51 PM

Page 1

Work Order ID: 148836

148836

Parent Item: D3533-1

D3533-1

Parent Item Name: Set Screw

Start Date: 7/11/2016

Required Date: 7/15/2016

Start Qty: 25.00

Required Qty: 25.00

Comments: IPP Rev:A New Issue 06-07-25 JLM verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

92311A564

Purchased

No

110

Each

0.0000

1

92311A564

Set Screw

~~27~~

50

50x 8p/6-7-18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

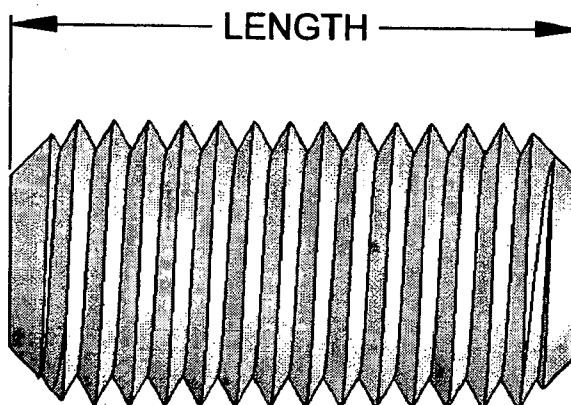
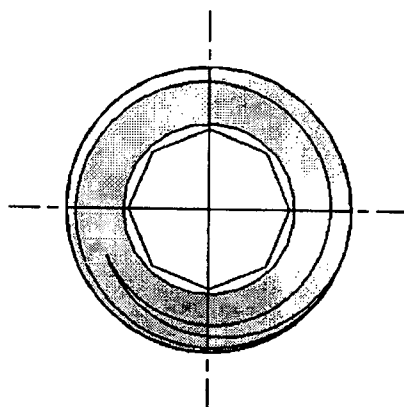
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																



DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED H	DRAWING NO. D3533	REV. B SHEET 1 OF 1
DATE 07.06.14		TITLE SET SCREW	SCALE NTS
REV	DATE	DESCRIPTION	
A	06.07.12	NEW ISSUE	
B	07.06.14	ADD D3533-3; ADD MATERIAL/FINISH COLUMN	

SPECIFICATION CONTROL DRAWING

RELEASED
07-08-03 H



B

PART NUMBER	MATERIAL AND FINISH	SIZE	LENGTH	POSSIBLE SUPPLIER
D3533-1	18-8 STAINLESS STEEL	1/4-28 UNF	1.000	McMASTER-CARR, P/N 92311A564
D3533-3	BLACK OXIDE ALLOY STEEL	#6-40 UNF	0.188	McMASTER-CARR, P/N 91375A161

B

NOTES:

- 1) TYPE: CUP POINT HEX HEAD SET SCREWS
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

16-07-11
NO 148856
WORK ORDER
WITHOUT NOTICE
SUBJECT TO AMENDMENT
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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								Completed By	
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Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO32990**

Purchase Order Date 7/11/2016

PO Print Date 7/11/2016

Page Number 1 of 4

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
JUL 11 2016

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	9610K17 AS PER DWG D3619 REV. A B148701	GROMMET	7/13/2016 Yes 7/13/2016		4.00 Each	\$12.90	\$51.60
Line Total:							\$51.60
2	92311A564 AS PER DWG D3533 REV. B B148836	Set Screw	7/13/2016 Yes 7/13/2016		50.00 Each	\$0.23	\$11.65
Line Total:							\$11.65
3	95606A170 AS PER DWG D3631 REV. A B148837	Washer	7/13/2016 Yes 7/13/2016		100.00 Each	\$0.09	\$8.60

Note:

7/11/2016



McMASTER-CARR®

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO32990

Order Placed By
Chantal Lavoie

McMaster-Carr Number
5704629-01

Page 1 of 1

07/11/2016

Line	Product	Ordered	Shipped
4	3132T2 Rope with Hook - Not for Lifting, Polyester Cover, 5/32" Diameter, 40' LG.	240 Feet	120

Shipped separately from our Cleveland warehouse on 07/11

1	9610K17 MIL Spec. Two-Piece Grommet Kit, Trade Size 1, 0.687" OD, 48 Grommets with Teeth Washers	4 Each	4
2	92311A564 18-8 Stainless Steel Cup Point Set Screw, 1/4"-28 Thread, 1" Long	1 Pack	1
3	95606A170 Nylon Flat Washer, 7/16" Screw Size, 0.500" ID, 0.688" OD, Off-White	1 Pack	
4	3132T2 Rope with Hook - Not for Lifting, Polyester Cover, 5/32" Diameter, 40' LG.	240 Feet	120
5	5346K18 Brass Barbed Hose Fitting, Adapter for 3/8" Hose ID X 1/4" NPTF Male Pipe	2 Packs	2
6	6534K72 Industrial-Shape Hose Coupling, Plug, Zinc-Plated, 3/8" NPTF Male, 3/8 Coupling Size	6 Each	6
7	42955A27 Single Cut Carbide Bur with 1/8" Shank Diameter, Tree-Radius End, 1/8" Head Diameter, 1/2" Cut LG.	5 Each	5
8	94675A019 3/8"-16 Pneumatic Nut Insert/Rivet Nut Tool	1 Each	1
9	14025A28 Magnet-Mount Hook, Single-Prong with 1-1/8" Projection, 2-1/4" High	2 Each	2